

Some Notes on Drosophilidae (Diptera).

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Several years ago while working on the immature stages of Diptera I undertook to arrange and extend the materials in the family Drosophilidae belonging to the collection of the State Natural History Survey of Illinois, and part of that work consisted of making keys to the genera. Shortly after I started the work I was informed of the more extensive work which Dr. Sturtevant had undertaken and dropped mine, at least insofar as it was intended for publication. Recently I received from Dr. Sturtevant a copy of his paper on Drosophilidae* and present the following notes on some of the genera as an addition to our knowledge of the family.

STEGANA Meigen.

Sturtevant has united this genus with *Phortica* Schiner in his paper. Though the characters usually cited for their separation are, as he says, unreliable, there are other characters present that, in my opinion, warrant the retention of *Phortica* as a separate genus.

In *Stegana* the frontal lunule is transverse above, the suture extending in a straight line almost from eye to eye above bases of antennae, while in at least the American species of *Phortica* it is arcuate above and indistinct except centrally; the mid tibia has some very noticeable setulae on posterodorsal surface which are not developed in *Phortica*; the scutellum is slightly flattened above, not regularly rounded, and elongate, while in *Phortica* it is convex, short and evenly rounded; and the second wing-vein is curved forward rather abruptly to costa at its apex, whereas in *Phortica* it is straight to apex, gradually approaching costa.

I took a single female of the genotype, *coleoptrata* Scopoli, on a tree-trunk at Urbana, Illinois, July 23, 1920.

PHORTICA Schiner.

Sturtevant unites Loew's two species in his paper, stating that an extensive series "shows graded color variations completely connecting these two extremes," and that he can find no

*Publication 301, Carnegie Institution, Washington, 1921.

other characters upon which to separate them. In my material, which is all from Illinois and all collected by myself since 1915, I find three species, two of which I assume to be those described by Loew. Several of the specimens taken were attracted evidently by perspiration and were very persistent in their efforts to settle on my hands and face.

Key to Species.

1. Male with some very long yellow bristles on basal half of postero-ventral surface of hind femur, the longest of which are longer than the diameter of femur; color of both sexes usually deep black; humeral and pleural spots milk-white and conspicuous; bristles of thorax yellowish, in male conspicuously so; frons in male usually slightly silvery and more or less whitish anteriorly. . . . *humeralis* Loew
Male without bristles as above; species brownish or yellowish, with or without conspicuous white humeral and pleural spots; frons not silvery 2
2. Face, humeri, and pleurae with milk-white spots. . . . *leucostoma* Loew
Face, humeri, and pleurae without milk-white spots, but little paler than the surrounding areas *minor* sp. n.
Phortica minor sp. n.

♂. Yellowish brown, slightly shining, legs slightly paler. Humeri and the pleural area occupied by the white spot in other species paler than the surrounding areas but inconspicuously so.

Structurally similar to *leucostoma*, differing in being 2 mm. in length, whereas *leucostoma* is 3 mm.

Type, Dubois, Illinois, June 5, 1920. Two paratypes, same locality, August 12, 1920, and June 3, 1919. Types in the collection of the State Natural History Survey, Urbana, Illinois.

MICRODROSOPHILA gen. n.

Generic characters: Similar to *Drosophila* in structure. Differs from that genus in having each orbit with two strong bristles, the outer one directed forward and placed a little anterior to the inner, which is backwardly directed; the mesonotum with two pairs of dorso-centrals, one pair a little proximal of the middle and the other near posterior margin; only one humeral bristle; basal pair of scutellars much weaker than apical pair, the latter not cruciate; costal setulae continued almost or quite to apex of third vein.

Genotype, *Drosophila quadrata* Sturtevant.

Sturtevant records this species from Alabama, Georgia, and Indiana. I took two specimens on windows in the Natural History Building of the University of Illinois, June 13 and August 4, 1915.